AMENDMENTS TO THE CLAIMS

1. (Currently amended) A nucleic acid probe comprising an end which is labeled with a fluorescent dye, and in which fluorescence of the fluorescent dye decreases upon hybridization, wherein ~~the nucleic acid probe has a nucleotide sequence starting from the nucleotide number 183 in the nucleotide sequence of SEQ ID NO: 1 and a length of 8 to 30 nucleotides, and the 5' end of the probe is labeled with the fluorescent dye, or~~ the nucleic acid probe has a nucleotide sequence ending at the nucleotide number 196 in the nucleotide sequence of SEQ ID NO: 2 and a length of 7 to 30 nucleotides, and the 3' end of the probe is labeled with the fluorescent dye.

2. (Currently amended) The nucleic acid probe according to claim 1, wherein the nucleic acid probe has ~~any one of~~ the nucleotide sequences of SEQ ID NOS: 8 ~~to 12~~.

3. (Previously presented) A method for detecting a mutation comprising performing a melting curve analysis for a nucleic acid having a single nucleotide polymorphism site by using a nucleic acid probe labeled with a fluorescent dye and measuring fluorescence of the fluorescent dye, and detecting the mutation on the basis of the result of the melting curve analysis, wherein the single nucleotide polymorphism is a mutation in a polynucleotide encoding a β3-adrenergic receptor, resulting in a mutation replacing tryptophan at position 64 in an amino acid sequence of the β3-adrenergic receptor with arginine, and the nucleic acid probe is defined in claim 1.

4. (Previously presented) The method according to claim 3, wherein a region containing the single nucleotide polymorphism site in a polynucleotide contained in a sample is amplified to obtain the nucleic acid showing the single nucleotide polymorphism.

5. (Previously presented) The method according to claim 4, wherein the amplification is performed using a DNA polymerase.

6. (Original) The method according to claim 5, wherein the amplification is performed in the presence of a nucleic acid probe.

7. (Currently amended) A kit for the method as defined in claim 3, comprising a nucleic acid probe comprising an end which is labeled with a fluorescent dye, and in which fluorescence of the fluorescent dye decreases upon hybridization, wherein ~~the nucleic acid probe has a nucleotide sequence starting from the nucleotide number 183 in the nucleotide sequence of SEQ ID NO: 1 and a length of 8 to 30 nucleotides, and the 5' end of the probe is labeled with the fluoreseent dye, or~~ the nucleic acid probe has a nucleotide sequence ending at the nucleotide

number 196 in the nucleotide sequence of SEQ ID NO: 2 and having a length of 7 to 30 nucleotides, and the 3' end of the probe is labeled with the fluorescent dye.

8. (Currently amended) The kit according to claim 7, wherein the nucleic acid probe has ~~any one of~~ the nucleotide sequences of SEQ ID NO~~S~~: ~~8 to 12~~.

9. (Previously presented) The kit according to claim 7, which further comprises a primer for amplifying a region containing a mutation in a polynucleotide encoding a β3-adrenergic receptor, resulting in a mutation replacing tryptophan at position 64 in an amino acid sequence of the β3-adrenergic receptor with arginine, by using a DNA polymerase.